



Tasmanian Field Naturalists Club Inc.

BULLETIN

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Quarterly Bulletin

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The Tasmanian Field Naturalists Club encourages the study of natural history and supports conservation. People of any age and background are welcome as members.

For more information, visit website <http://www.tasfieldnats.org.au/>; email info@tasfieldnats.org.au; write to GPO Box 68, Hobart, 7001; or phone our secretary on mobile 0418 942 781.

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Program

General Meetings start at **7.15pm** for 7.30pm on the first Thursday of the month, in the Life Science Building at the University of Tasmania.

Excursions are usually held the following Saturday or Sunday, meeting at 9.00am outside the Museum in Macquarie St, Hobart. Bring lunch and all-weather outdoor gear.

If you are planning to attend an outing, but have not been to the prior meeting, please confirm the details as late changes are sometimes made.

Thu 5 Aug	Meeting 7.15pm in Life Sciences building, University of Tasmania. Our speaker will be Dr Peter McQuillan , sharing with us the <i>Fascinating World of Tasmanian Ants</i> .
Sun 8 Aug	Excursion along the Kaoota Tramway Track. Meet 9.00am at the Museum in Macquarie St, Hobart; then rendezvous 9.30am at the start of Lawless Rd , 3km up Nierinna Rd from Margate, south of Hobart. The walk is one-way 5½km gently up through several vegetation types to Kaoota Rd. There will be a van waiting at Kaoota to bring drivers back for their cars at Lawless Rd. Bring warm wet weather gear and lunch.
Thu 2 Sept	Meeting at 7.15pm in Life Sciences building, University of Tas. James Wood , Seed Bank coordinator, photographer, and TFNC member, will present <i>A Visit to China</i> .
Sat 3 or Sun 4 Sep	Excursion: TBA.
Thurs 7 Oct	Meeting at 7.15pm in Life Sciences building, University of Tas. Kris Carlyon wildlife biologist at DPIPWE, discussing <i>Koala: an icon with issues</i> .

Sat 9 or Sun 10 Oct	Excursion:TBA.
Sat 27 Nov	Pelagic bird observing boat-trip from Eaglehawk Neck. Privately organised by Bill Wakefield. See website program for booking details.

Oh what a night...! Bat trapping with Lisa Cawthen

Peter Murrell Reserve 8 May 2010

Nell Hilliard

Around 40 members and guests met at the car park near Penryn Pond at 5.30 pm, gloved, 'beanied' and coated. The air buzzed with barely suppressed excitement as Lisa Cawthen unpacked her ute, and fitted batteries to her recorders. The younger members of the group assumed looks of great superiority as they were entrusted the recorders. Lisa's research has shown that more mature persons soon loose altitude in their recorder arms!

Adam the ranger had earlier helped erect a harp trap on one of the cross tracks where the trees came together in a natural tunnel. We were to put up two additional traps. Many hands made light work, and we soon set off to check the first trap, pausing to admire a tawny frogmouth (*Podargus strigoides*) alighted near the track, and accompanied by the haunting call of the wood ducks (*Chenonetta jubata*) on the pond as they settled for the night.

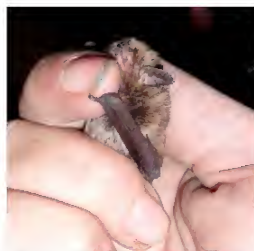
Further brief diversions cased by photographing an orb weaving spider, a white moth and trying to locate a garden katydid barely ruffled our purpose, and at 6 pm the foraging signal of a forest bat was recorded, with a positive i.d. at 6.10pm- a southern forest bat (*Vespadelus regulus*). This is a very common bat in Tasmania.

The next signal identified was the commuting signal of a Gould's wattled bat, (*Chalinolobus gouldii*), displaying a very different shape to that of the previous recording on Lisa's computerized sound graph.

We were disappointed to discover that an escape had occurred at the first erected trap, on the cross-track. However, Lisa was happy to make a collection of the evidence (minute mouse-like droppings with a point at one end) which she explained came in handy when making up a

customising spray to make bat boxes more appealing to their intended inhabitants.

As the next trap also was empty, some gloom descended until we were chided by our leader,



who explained that bats pick up on doubt! The site had some drawbacks, as the diffuse canopy did not funnel bats into a defined flight-path, unlike the Pipeline Track on

Mt Wellington for instance.

At last at 6.50 pm, we were called back to a trap we had just checked. A little forest bat (*Vespadelus vulturnis*) was identified, by its white tragus and silver belly fur. See photo above.

After about a thousand photos had been taken, Lisa slipped it into a special cloth carrier bag, and we headed back to the car park to take its measurements.

The small adult male, in non-breeding state, weighed in at 5 g, with intricately formed ears and beautiful wings, conjoined to the tail which is actually used to capture prey during flight.

Lisa constantly stroked and soothed the small feisty creature, in order to prevent it entering torpor from the stress of captivity. She explained that she often tucked them under her arms to keep them warm! We speculated that it may have broadcast a warning signal, which may be identified later on the recorder.

After countless more photos, it was time to set him free. Like a perfect star he flew straight toward the recorder!

As we headed back along the track to dismantle the traps, Lisa shared more of her wisdom, and mentioned that she was always on the look-out for volunteers.

One anticipated project is to set up a trap over a pond. As bats can easily swim, many helpers are needed. Harp traps also need restringing .

Email lcawthen@gmail.com if you would like to help.

Species list

Tawny frogmouth—*Podargus strigoides*

Wood duck—*Chenonetta jubata*

Southern forest bat—*Vespadelus regulus*
(recorded)

Little forest bat—*Vespadelus vulturnus*

Chocolate wattled bat—*Chalinolobus morio*
(recorded)

Gould's wattled bat—*Chalinolobus gouldii*
(recorded)

Brush-tail possum—*Trichosurus vulpecular*

Ringtail possum—*Pseudocheirus peregrinus*

Flatworm—Phylum *Platyhelminthes*

What did we Find?

Invertebrates Collected from our Previous Fieldwork at Peter Murrell Reserve

University of Tasmania Sat, 5 June 2010

Abbey Throssell

About a dozen Field Nats gathered in the UTAS botany labs to sort and identify invertebrates from the pitfall samples collected at Peter Murrell Reserve in March.

It was raining and cold outside, so not a bad day to be inside. Each person took a microscope and a container full of specimens preserved in ethanol from one pitfall trap, and began to sort them into basic taxonomic groups (spiders, beetles, flies

etc.), separating these into smaller vials and counting how many of each group were present. A few members who were familiar with this sort of work were on hand to answer questions and identify anything unusual.

One of the more spectacular finds was a very slender assassin bug that appeared in Nell's sample, with mantis-like forelimbs for grabbing prey.



Concentration plus!



Scorpion & mites



An assortment of goodies

A small and very pretty frog drew a small crowd of admirers, and was especially popular with the children. Plenty of scorpions were found and easily identified as there is only one species in Tasmania.

Kevin had the misfortune to choose a sample containing hundreds of tiny springtails (*Collembola*) that the rest of us could barely see, and spent a large part of his time counting them all. I then had a sample with thousands of ridiculously small white mites, camouflaging very

nicely against the white grains of sand in the bottom of the container. After saving half a dozen for posterity, I ignored the rest as being not worth the hours it would take to pick out and count! By the time we packed up around 1.30 pm, 16 out of the 42 pitfall samples had been sorted.

A full summary of the invertebrates collected from the Peter Murrell Reserve will be presented to the Field Nats when all samples have been sorted. Thank you to Anna McElDowney and Lynne Forster for organising this outing

Creature Feature: Enamelled Spider and Banded Orb Weaver at Huntingfield

Lynne Forster

During TFNC's recent survey of fire impacts at Peter Murrell Reserve, it wasn't possible to walk far without encountering large spider webs in low vegetation and reeds.

Webs were occupied by a fairly large, 15 mm, colourful female spider, *Araneus bradleyi*, known as the enamelled spider. Most people are probably familiar with its more common white form (fig 1). It was intriguing to discover, however, that one of the control sites harboured

a diversity of forms of *A. bradleyi* that I had not previously encountered anywhere.

Apart from variations in patterning of the white form, the yellow form was particularly bright (fig 2) while the jade form (fig 3) was so cryptic it was difficult to believe it was the same species. The spiders feed on small flying insects trapped in their webs and are found in the eastern Australian States.



Fig. 1 *Araneus bradleyi*
white form



Fig. 2 *Araneus bradleyi*
yellow form



Fig. 3 *Araneus bradleyi*
jade form

The survey also provided my first encounter with *Argiope trifasciata* (figs. 4-6), a 17 mm female banded orb weaver which shared the same control site as the diverse enamelled spiders. *A. trifasciata*'s body is brownish but is totally covered by dense white hairs. Its relative, the St Andrew's Cross spider, *Argiope keyserlingi*, builds a stabilimentum forming a cross in the centre of its web, unlike *A. trifasciata*.

A. trifasciata is also native to Queensland and Western Australia as well as America and South Pacific islands. The species is not harmful to humans but a series of argiotoxins extracted from its venom (used to subdue prey) are being explored to block neurotransmitters by blocking glutamate receptors to treat dementia, epilepsy and so on.

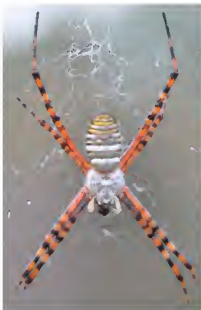


Fig. 4 *Argiope trifasciata* dorsal

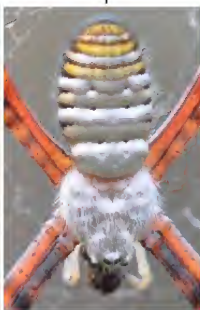


Fig. 5 *Argiope trifasciata* dorsal

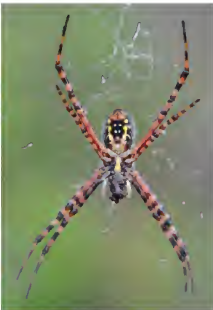


Fig. 6 *Argiope trifasciata* ventral

Bird Monitoring in the Peter Murrell Reserve

March 2010 Excursion

Fiona Hume and Michael Driessen

We provide a summary of the bird survey conducted in the Peter Murrell Reserve during the March 2010 excursion. The presence of bird species was recorded on two transect lines in each of four fire management blocks.

One block was scheduled for a planned burn in autumn 2010 (and has been burnt) and we chose an adjacent unburned block to use for comparison.

A third block was burnt in 2008 and we also chose an adjacent unburned block for comparison. Each transect line was surveyed twice, once in the morning and once in the afternoon, over two days.

Twenty eight bird species were observed during the survey and all have previously been reported from the reserve (Figure 1).

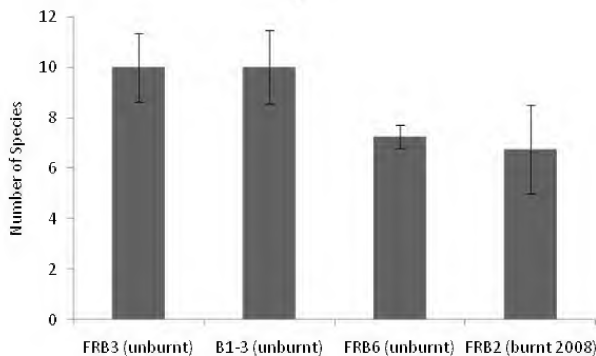


Figure 1. Mean number of bird species recorded per fire management block. No of surveys per block equals four.

The most commonly recorded species were the brown thornbill (recorded on 15 of 16 surveys), yellow-throated honeyeater (14), dusky woodswallow (13) and superb fairy wren (10).

Fewer species were recorded at blocks FRB2 and FRB6 than at blocks FRB3 and B1-3 (Figure 1) and fewer species were recorded during the afternoon surveys than during the morning surveys (Figure 2).

No clear differences were observed between the bird communities of the designated treatment sites (FRB3 and FRB2) and their respective controls (B1-3 and FRB6).

Thus we were unable to detect a difference in the bird fauna between the block that was last burnt two years ago in 2008 (FRB2) and the control block (FRB6) which was believed to have been last burnt 22 years ago in 1988 despite quite clear differences in the vegetation.

This may reflect the high mobility of bird species and some limitations of our survey design to detect differences. We plan to publish a more detailed analysis of the bird survey in the *Tasmanian Naturalist*.

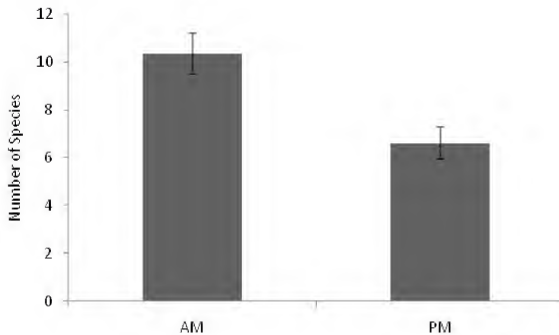


Figure 2. Mean number of bird species recorded during morning (AM) and afternoon (PM) surveys. Data pooled over all transects. Samples size equals eight.

Federation of Field Naturalist Clubs Fungi Foray

Hosted by Central North Field Nats and Fungimap at Weldborough and Blue Tier, May 2010.

Nell Hilliard

Weldborough Hall was buzzing on Friday evening at 8 pm when between 40 and 50 people met for Paul George's introductory presentation, to admire the gallery of Sarah Lloyd's photos and examine the array of fungi collected over the previous five days by the 12 mycologists from as far afield as WA and Japan. A patio heater bravely sought to combat the plunging temperature as Paul George from Melbourne told us:

- how ancient are fungi, having preceded flowering plants on earth;
- how they comprise 15% of Victoria's biodiversity (next after invertebrates at 80%);
- how their role within the ecosystem in decomposition of cellulose, lignin and protein is crucial in recycling nutrients;
- how crucial is their role in quickly stabilising and acidifying soil following fire;
- how they can combat plant diseases and consume harmful bacteria;

- how they provide food for invertebrates and mammals; and lastly
- how they improve soil structure after disturbance.

We (almost!) did not notice the cold.

Saturday morning was heralded by a large flock of black cockatoos (*Calyptrorhynchus funereus*) which berated us for wasting the beautiful day, as we tried to ignore the thermometer at -4.5 degrees.

I joined the group headed for Emu Flat, just two minutes drive behind the hotel, having figured that this would allow maximum time for foraging.

Pam Catcheside from Melbourne was our leader, and she did not disappoint, as we identified 43 species within the next two hours, having begun in the campground as we waited for stragglers.

Here we saw *Amanita muscari*, a target species. *Amanita muscari* (Fly Agaric) has been introduced but has been found colonising *Notofagus cunninghami*.

Pam vainly cajoled an Ugly Milkcap (*Lacaria sp*) to show its sap by cutting the gills but unfortunately it was too frozen to oblige.



Amanita muscari



Hericium coralloides



Earth Tongue, a club fungus

Target species have been chosen by Fungimap mycologists to be easily identified in the field, and may be common or rare, native or introduced.

It is hoped that enough people will send in records and pictures to establish a much needed map of their distribution in Australia, and thus increase our understanding of their distribution, associations and importance in the landscape.

On Saturday morning we recorded 6 target species:

1. *Amanita muscari*—Fly Agaric
2. *Schizophyllum commune*—Splitgill
3. *Mucronella pendula*—Icicle
4. *Pseudohydnum gelatinosum*—Toothed Jelly
5. *Podoserpula pusio*—Pagoda Fungus
6. *Pleurotus australis*—Brown Oyster

The afternoon workshop was led by Pam and assisted by Katrina Syme of WA on the topic of using a key to identify gilled fungi. Incidentally, the making of a herbarium collection was discussed, a complex procedure of notes taking about an hour for each species. We saw a slide prepared and marvelled at the intricate structure of the spores.

The evening session by Tom May of the RBG Melbourne saw enthusiasts in gloves, beanies, coats (even some with hot-water bottles and blankets)keen to hear about the importance of Tasmania's cool temperate rainforest as habitat and refuge for fungi. The symbiotic relationship of *Mycene toyerlaricola*, *Cytarria gunii* and *Hericium coralloides* was cited in this context.

As development and climate change impact on natural ecosystems, reserves and national parks

containing areas of significant fungi are very important, but the fungi are rarely cited.

Sunday produced another frost, as we headed up to Poimena in the Blue Tiers to do the quaintly named Goblin Walk.

Our first steps into the Pomaderis and Leptospermum forest revealed the floor massed with Earth Tongues and Orange Flames, both club fungi, among the wall to wall carpeting of lichen and mosses. Target species recorded were:

1. *Hygrocybe lewellinae*—Mauve Splitting Waxcaps
2. *Mycene interrupta*—Pixies' Parasol
3. *Lichenomphalia chromacea*—Yellow Navel

Sapphire McMullen-Fisher of Queensland gave us further insight into the field identification of the 105 target species that afternoon, though it was to a depleted gathering.

The highlights for me were the display of Sarah Lloyd's breathtaking photos of the natural history of the Blue Tier region, spending time with the mycologists who observed, explained and shared with unfailing patience, and the realisation that here was something I might hope to memorise and perhaps make a contribution.

Next day I was lucky enough to be able to walk part of the Leven Canyon track, and identified *Stereum ostrea* (Golden Curtain Crust), *Armillaria luteobubalina* (Australian Honey Fungus) and *Podoserpula pusio* (Pagoda Fungus). Fungimap will certainly hear from me!

For more information visit the Fungimap website at www.rbg.gov.au/fungimap/

Indexing the Tasmanian Naturalist: Can you Help?

Mark Wapstra

Editor, The Tasmanian Naturalist

I am coordinating the indexing of the old editions of *The Tasmanian Naturalist*.

The project involves scanning individual editions, applying optical text recognition software and manipulating PDF files.

The process is easiest for loose editions of the *Naturalist*, which are available from 1965 onwards. However, I am also seeking any copies of **unbound editions of the *Naturalist* from between 1907 and 1955**.

In addition, there may be other documents of interest such as Easter Camp reports (which were often issued separately to the *Naturalist*), and

some pre-*Naturalist* (i.e. prior to 1907) articles published by the TFNC.

If any Club member has copies that could be made available for scanning, would you please give them to me at a meeting or mail to:

Mark Wapstra
28 Suncrest Avenue
Lenah Valley 7008.

Scanning will not damage the material and all material will be returned as quickly as possible.

With thanks for any assistance from Club members.

Mark Wapstra

Subscriptions Reminder

Anna McEldowney (Treasurer)

Have you paid your 2010 subs yet? A reminder that membership subs are due on 1 Jan each year.

Please send a cheque payable to Tasmanian Field Naturalists Club Inc, addressed to the Treasurer TFNC, GPO Box 68, Hobart, 7001; or pay by EFT to BSB 067102 Account number 28000476 in the name of Tasmanian Field Naturalists Club Inc. PLEASE put your surname AND initials in the transfer so I can identify the payments.

If you have joined since October last year your subs will carry over to 2010.

Membership rates are: Adult—\$30, Family—\$35, Concession—\$25.

Photo credits

Little Forest Bat (*Vespadelus vulturnis*)—Nell Hilliard

Concentration plus, Scorpion & mites, An assortment of goodies—Abbey Throssal

All spider photos—Lynne Forster

All fungi photos—Nell Hilliard

